

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P238335

Luminaire Tested: **PRS620D010-S6M12-61SWWC-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-25)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS620D010-S6M12-61SWWC-4000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WALL WASH DISTRIBUTION, WW TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1592.9 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 0.94 / 1.03
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

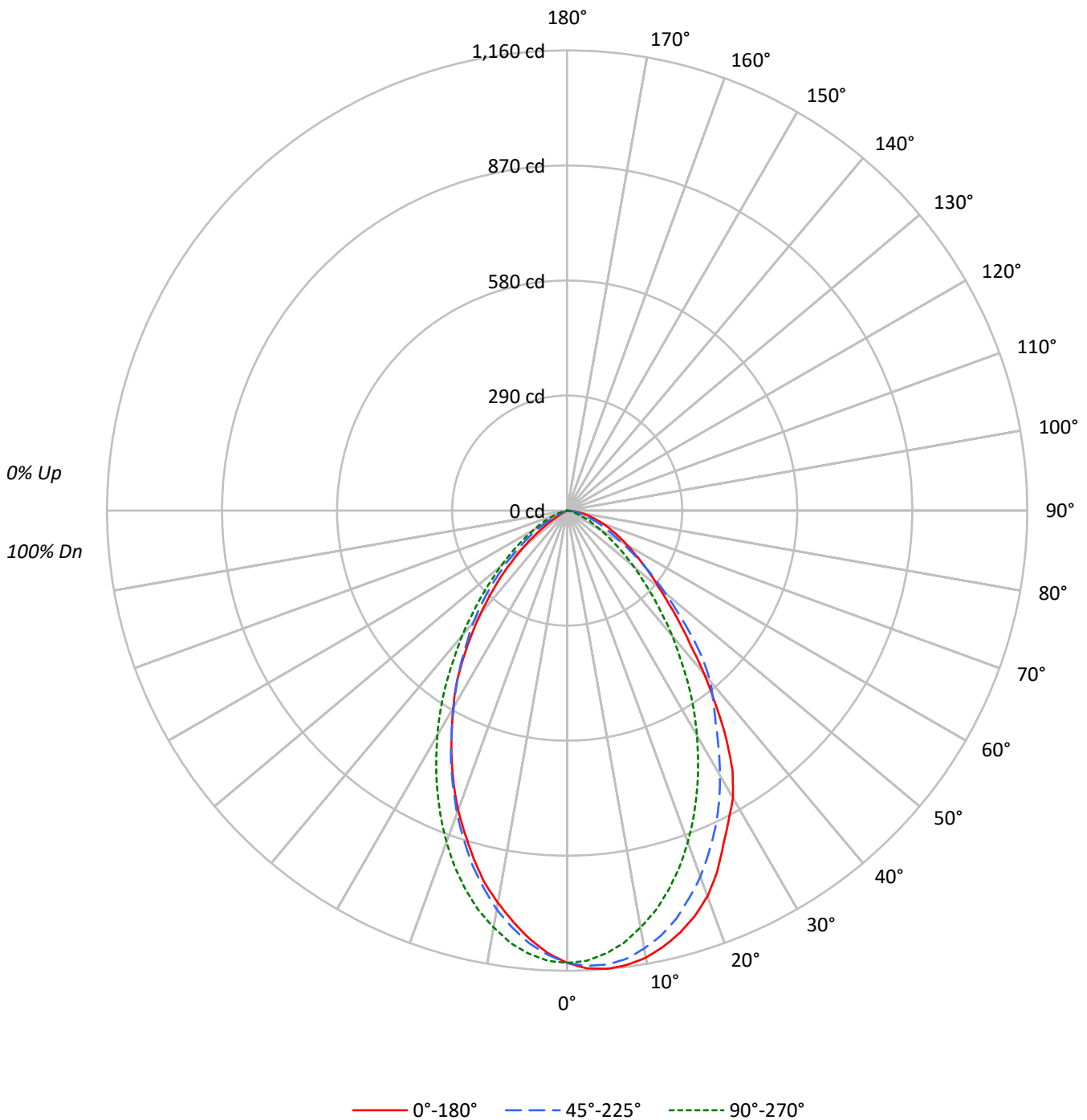
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71				71
4	91	81	74	69	89	80	73	68	78	72	67	75	71	67	73	69	66	64				64
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	60	58				58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52				52
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	49088	49088	49088
5°	50114	48432	46846
10°	50033	46632	43895
15°	49085	44080	40518
20°	47390	40760	36802
25°	44210	36827	32723
30°	41543	32524	28552
35°	36656	27921	24063
40°	30216	23179	19054
45°	24453	18535	14333
50°	20249	14609	9545
55°	17340	11185	5187
60°	15061	8370	1490
65°	13417	6164	0
70°	12236	4079	0
75°	10414	2512	0
80°	9100	1612	0
85°	6422	1087	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	6.6
10°-20°	278.6	17.5
20°-30°	361.9	22.7
30°-40°	347.8	21.8
40°-50°	256.0	16.1
50°-60°	147.0	9.2
60°-70°	66.6	4.2
70°-80°	24.8	1.6
80°-90°	4.7	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	745.9	46.8
0°-40°	1093.7	68.7
0°-60°	1496.7	94.0
0°-90°	1592.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1592.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1140	1140	1140	1140	1140	
5°	1160	1149	1121	1095	1084	110
15°	1101	1064	989	924	909	309
25°	931	883	775	693	689	429
35°	697	652	531	464	458	432
45°	402	440	304	272	235	313
55°	231	227	149	121	69	209
65°	132	106	60	26	0	132
75°	63	43	15	0	0	68
85°	13	6	2	0	0	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1
2.5°	1155.2	1155.2	1155.2	1153.0	1153.0	1155.2	1153.0	1153.0	1150.9	1150.9	1148.7
5°	1159.5	1159.5	1159.5	1159.5	1157.3	1157.3	1157.3	1155.2	1153.0	1150.9	1148.7
7.5°	1155.2	1155.2	1155.2	1155.2	1153.0	1153.0	1150.9	1148.7	1146.5	1142.2	1140.1
10°	1144.4	1144.4	1144.4	1142.2	1140.1	1137.9	1137.9	1133.6	1129.3	1124.9	1120.6
12.5°	1124.9	1124.9	1122.8	1122.8	1118.5	1118.5	1116.3	1112.0	1107.7	1103.4	1096.9
15°	1101.2	1099.0	1099.0	1096.9	1092.6	1090.4	1088.2	1081.8	1075.3	1068.8	1064.5
17.5°	1071.0	1068.8	1066.6	1064.5	1058.0	1053.7	1051.5	1045.1	1038.6	1032.1	1023.5
20°	1034.3	1032.1	1029.9	1025.6	1021.3	1017.0	1012.7	1006.2	997.6	988.9	982.4
22.5°	986.8	984.6	982.4	980.3	973.8	969.5	967.3	960.8	952.2	943.6	932.8
25°	930.6	930.6	932.8	926.3	922.0	917.7	917.7	911.2	902.5	891.8	883.1
27.5°	881.0	881.0	876.6	872.3	865.8	861.5	859.4	852.9	848.6	839.9	829.1
30°	835.6	833.5	829.1	824.8	818.3	811.9	805.4	796.7	788.1	779.5	770.8
32.5°	775.2	773.0	773.0	773.0	766.5	764.4	760.0	749.2	738.4	723.3	710.4
35°	697.4	695.3	693.1	695.3	699.6	701.7	703.9	699.6	688.8	671.5	652.1
37.5°	613.2	615.4	617.5	619.7	626.2	630.5	628.3	637.0	634.8	624.0	604.6
40°	537.6	537.6	539.8	546.3	552.8	554.9	557.1	565.7	565.7	567.9	561.4
42.5°	462.1	468.5	470.7	475.0	481.5	485.8	490.1	498.8	500.9	509.6	505.3
45°	401.6	405.9	410.2	414.6	421.0	425.4	427.5	434.0	440.5	444.8	440.5
47.5°	347.6	349.8	352.0	356.3	362.7	364.9	369.2	375.7	382.2	380.0	375.7
50°	302.3	304.4	304.4	310.9	315.2	317.4	317.4	326.0	326.0	326.0	321.7
52.5°	265.6	265.6	267.7	269.9	274.2	274.2	278.5	282.9	278.5	276.4	272.1
55°	231.0	231.0	233.2	235.4	235.4	237.5	239.7	239.7	235.4	231.0	226.7
57.5°	200.8	203.0	203.0	205.1	207.3	205.1	207.3	203.0	198.6	194.3	187.9
60°	174.9	177.1	177.1	179.2	179.2	179.2	177.1	172.7	166.3	161.9	155.5
62.5°	153.3	153.3	153.3	153.3	153.3	153.3	151.1	146.8	140.3	136.0	129.6
65°	131.7	131.7	131.7	131.7	129.6	129.6	127.4	123.1	116.6	112.3	105.8
67.5°	112.3	112.3	112.3	112.3	110.1	108.0	105.8	103.6	97.2	92.8	88.5
70°	97.2	95.0	95.0	92.8	90.7	88.5	88.5	84.2	79.9	75.6	71.3
72.5°	77.7	77.7	77.7	77.7	73.4	73.4	71.3	66.9	62.6	60.5	56.1
75°	62.6	62.6	62.6	60.5	58.3	58.3	56.1	54.0	49.7	47.5	43.2
77.5°	49.7	49.7	49.7	47.5	45.3	43.2	43.2	41.0	36.7	34.5	32.4
80°	36.7	36.7	34.5	32.4	32.4	30.2	30.2	28.1	25.9	23.8	21.6
82.5°	23.8	23.8	23.8	21.6	21.6	19.4	19.4	19.4	17.3	15.1	13.0
85°	13.0	13.0	13.0	10.8	10.8	10.8	10.8	10.8	8.6	8.6	6.5
87.5°	2.2	2.2	2.2	2.2	2.2	4.3	2.2	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1
2.5°	1148.7	1146.5	1144.4	1144.4	1142.2	1142.2	1140.1	1137.9	1135.7	1135.7	1133.6
5°	1146.5	1144.4	1140.1	1137.9	1135.7	1133.6	1131.4	1127.1	1124.9	1120.6	1118.5
7.5°	1135.7	1131.4	1127.1	1122.8	1120.6	1118.5	1112.0	1107.7	1103.4	1099.0	1094.7
10°	1116.3	1112.0	1105.5	1101.2	1096.9	1092.6	1088.2	1079.6	1073.1	1066.6	1060.2
12.5°	1090.4	1083.9	1077.4	1068.8	1066.6	1062.3	1055.9	1047.2	1040.7	1032.1	1023.5
15°	1058.0	1047.2	1042.9	1032.1	1027.8	1023.5	1017.0	1008.3	999.7	988.9	980.3
17.5°	1014.8	1004.0	999.7	988.9	984.6	980.3	969.5	960.8	952.2	941.4	930.6
20°	971.6	963.0	952.2	941.4	937.1	932.8	919.8	911.2	902.5	889.6	881.0
22.5°	922.0	911.2	900.4	891.8	885.3	881.0	870.2	859.4	846.4	833.5	822.7
25°	872.3	859.4	848.6	837.8	829.1	824.8	811.9	798.9	786.0	775.2	762.2
27.5°	816.2	805.4	792.4	777.3	770.8	764.4	751.4	736.3	725.5	714.7	701.7
30°	757.9	747.1	732.0	719.0	712.5	706.1	693.1	680.1	669.4	654.2	641.3
32.5°	699.6	688.8	675.8	662.9	658.6	649.9	634.8	624.0	608.9	593.8	583.0
35°	643.4	634.8	621.9	606.7	595.9	587.3	572.2	554.9	542.0	531.2	520.4
37.5°	591.6	578.7	561.4	542.0	531.2	522.5	503.1	490.1	479.3	466.4	462.1
40°	537.6	516.0	496.6	477.2	468.5	457.8	442.6	429.7	421.0	412.4	401.6
42.5°	485.8	457.8	436.2	418.9	408.1	401.6	384.3	375.7	364.9	354.1	349.8
45°	427.5	405.9	380.0	362.7	354.1	347.6	332.5	321.7	310.9	304.4	298.0
47.5°	369.2	352.0	328.2	308.8	302.3	295.8	285.0	272.1	263.4	256.9	250.5
50°	310.9	298.0	285.0	263.4	256.9	254.8	241.8	231.0	222.4	218.1	211.6
52.5°	263.4	252.6	239.7	224.6	218.1	211.6	203.0	192.2	187.9	181.4	177.1
55°	218.1	207.3	200.8	190.0	181.4	177.1	168.4	161.9	155.5	149.0	144.7
57.5°	179.2	172.7	166.3	157.6	153.3	149.0	140.3	133.9	127.4	120.9	116.6
60°	149.0	142.5	136.0	129.6	125.2	123.1	114.4	108.0	101.5	97.2	92.8
62.5°	123.1	118.8	112.3	105.8	101.5	99.3	92.8	86.4	79.9	77.7	73.4
65°	101.5	97.2	90.7	84.2	84.2	79.9	73.4	69.1	64.8	60.5	56.1
67.5°	84.2	77.7	73.4	69.1	64.8	62.6	58.3	54.0	49.7	45.3	43.2
70°	66.9	62.6	58.3	51.8	49.7	47.5	43.2	38.9	36.7	32.4	30.2
72.5°	51.8	47.5	43.2	38.9	36.7	34.5	32.4	28.1	25.9	23.8	21.6
75°	41.0	36.7	32.4	28.1	28.1	25.9	23.8	19.4	17.3	15.1	15.1
77.5°	28.1	25.9	23.8	19.4	19.4	17.3	15.1	13.0	13.0	10.8	8.6
80°	19.4	17.3	15.1	13.0	10.8	10.8	8.6	8.6	6.5	6.5	4.3
82.5°	13.0	10.8	8.6	6.5	6.5	6.5	4.3	4.3	4.3	2.2	2.2
85°	6.5	4.3	4.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1
2.5°	1131.4	1129.3	1127.1	1127.1	1127.1	1124.9	1122.8	1120.6	1120.6	1118.5	1118.5
5°	1114.1	1109.8	1107.7	1105.5	1105.5	1101.2	1099.0	1096.9	1094.7	1092.6	1090.4
7.5°	1088.2	1083.9	1079.6	1075.3	1075.3	1071.0	1066.6	1064.5	1060.2	1058.0	1055.9
10°	1055.9	1051.5	1045.1	1040.7	1036.4	1034.3	1027.8	1023.5	1021.3	1014.8	1012.7
12.5°	1014.8	1008.3	1001.9	997.6	995.4	988.9	982.4	980.3	973.8	969.5	967.3
15°	971.6	963.0	954.4	952.2	947.9	941.4	934.9	928.5	924.1	917.7	917.7
17.5°	922.0	911.2	904.7	898.2	896.1	887.4	878.8	874.5	868.0	863.7	861.5
20°	868.0	857.2	848.6	844.2	837.8	831.3	822.7	818.3	811.9	807.5	805.4
22.5°	809.7	796.7	788.1	783.8	779.5	768.7	762.2	757.9	751.4	747.1	744.9
25°	749.2	740.6	729.8	723.3	719.0	708.2	701.7	697.4	693.1	688.8	686.6
27.5°	688.8	675.8	665.0	660.7	656.4	649.9	639.1	632.6	630.5	628.3	626.2
30°	628.3	617.5	606.7	600.3	593.8	587.3	580.8	574.3	572.2	567.9	563.6
32.5°	572.2	561.4	550.6	546.3	542.0	531.2	524.7	520.4	518.2	509.6	507.4
35°	513.9	505.3	498.8	494.5	492.3	483.7	479.3	468.5	464.2	459.9	457.8
37.5°	453.4	444.8	438.3	438.3	434.0	429.7	425.4	421.0	412.4	410.2	408.1
40°	395.1	388.7	384.3	380.0	380.0	377.9	373.5	373.5	367.1	362.7	356.3
42.5°	341.2	336.8	332.5	332.5	330.4	328.2	323.9	323.9	319.6	315.2	308.8
45°	291.5	285.0	282.9	282.9	280.7	278.5	276.4	276.4	272.1	267.7	263.4
47.5°	246.1	241.8	239.7	237.5	235.4	235.4	233.2	231.0	228.9	224.6	220.2
50°	207.3	203.0	200.8	198.6	198.6	196.5	194.3	190.0	190.0	183.5	179.2
52.5°	172.7	170.6	166.3	164.1	161.9	159.8	157.6	155.5	151.1	146.8	144.7
55°	140.3	136.0	133.9	131.7	129.6	127.4	125.2	123.1	120.9	114.4	110.1
57.5°	112.3	108.0	105.8	105.8	103.6	99.3	97.2	95.0	90.7	86.4	79.9
60°	88.5	86.4	82.0	82.0	79.9	75.6	73.4	69.1	64.8	58.3	54.0
62.5°	69.1	66.9	62.6	60.5	60.5	56.1	51.8	47.5	43.2	38.9	32.4
65°	51.8	49.7	47.5	45.3	43.2	38.9	34.5	30.2	25.9	19.4	13.0
67.5°	38.9	36.7	32.4	32.4	30.2	25.9	21.6	17.3	10.8	6.5	2.2
70°	28.1	25.9	21.6	19.4	19.4	15.1	10.8	6.5	0.0	0.0	0.0
72.5°	19.4	17.3	13.0	10.8	10.8	6.5	2.2	0.0	0.0	0.0	0.0
75°	13.0	10.8	6.5	6.5	4.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	6.5	4.3	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P238335

CATALOG NUMBER: PRS620D010-S6M12-61SWWC-4000K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1	1140.1
2.5°	1118.5	1116.3	1116.3	1116.3	1114.1	1116.3	1116.3	1116.3
5°	1088.2	1088.2	1086.1	1086.1	1086.1	1083.9	1083.9	1083.9
7.5°	1051.5	1051.5	1049.4	1049.4	1049.4	1047.2	1045.1	1045.1
10°	1010.5	1010.5	1008.3	1008.3	1008.3	1006.2	1004.0	1004.0
12.5°	963.0	963.0	963.0	960.8	960.8	960.8	958.7	960.8
15°	915.5	913.3	913.3	911.2	909.0	909.0	909.0	909.0
17.5°	859.4	857.2	857.2	855.0	857.2	855.0	855.0	855.0
20°	801.1	801.1	801.1	801.1	801.1	801.1	803.2	803.2
22.5°	744.9	742.8	744.9	742.8	742.8	744.9	744.9	747.1
25°	686.6	684.5	684.5	686.6	686.6	686.6	688.8	688.8
27.5°	621.9	626.2	626.2	628.3	628.3	630.5	632.6	630.5
30°	565.7	565.7	565.7	567.9	570.0	572.2	574.3	574.3
32.5°	505.3	507.4	509.6	507.4	509.6	513.9	518.2	520.4
35°	455.6	451.3	449.1	449.1	451.3	453.4	455.6	457.8
37.5°	401.6	399.5	397.3	393.0	395.1	397.3	397.3	397.3
40°	352.0	347.6	345.5	343.3	341.2	339.0	339.0	339.0
42.5°	304.4	300.1	295.8	295.8	289.3	287.2	287.2	285.0
45°	259.1	254.8	250.5	250.5	244.0	237.5	235.4	235.4
47.5°	215.9	209.4	207.3	205.1	198.6	192.2	187.9	185.7
50°	174.9	168.4	166.3	164.1	157.6	149.0	144.7	142.5
52.5°	138.2	131.7	127.4	125.2	116.6	110.1	105.8	103.6
55°	103.6	99.3	95.0	92.8	84.2	75.6	69.1	69.1
57.5°	75.6	66.9	64.8	62.6	54.0	47.5	41.0	38.9
60°	49.7	41.0	38.9	36.7	28.1	21.6	19.4	17.3
62.5°	25.9	19.4	17.3	15.1	10.8	6.5	4.3	4.3
65°	8.6	2.2	2.2	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)